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## Patent Abstracts of Japan

PUBLICATION NUMBER : 09235545  
PUBLICATION DATE : 09-09-97

APPLICATION DATE : 18-12-96  
APPLICATION NUMBER : 08338202

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INT.CL. : C09K 9/02 B41M 5/26 C08K 5/00 C08L101/00 C09B 67/08 C09B 67/42

TITLE : THERMOCHROMIC POLYMER COMPOSITION AND FORMED THERMOCHROMIC  
POLYMER ARTICLE PRODUCED BY USING THE COMPOSITION AS SUBSTRATE

ABSTRACT : PROBLEM TO BE SOLVED: To obtain the subject composition composed of a polymeric compound and a dye, varying the spectral characteristics by the change in the compatibility at a specific temperature, producible at a low cost, usable without necessitating separate substrate, capable of arbitrarily changing the temperature to change the spectral characteristics and useful for various recording material, memory material, etc.

SOLUTION: This composition is composed mainly of (A) a polymeric compound such as a thermoplastic polymer (e.g. an olefin resin having a crystallinity of 10-75% such as ethylene resin or propylene resin) and (B) a dye (e.g. a dye having a hue difference between the hue based on the reflection spectrum in solid state and the hue based on the transmission spectrum in chloroform solution of  $\geq 5^\circ$  in terms of  $\Delta h$  representing the hue angle difference in LCh color specification system). The spectral characteristics are varied by making the compatibility of the components A and B to be varied at a temperature lower than the melting point of the component A by e.g.  $\geq 5^\circ\text{C}$ . The temperature to vary the spectral characteristics is controllable e.g. by controlling the concentration of the component B in the composition.

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